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FM NPIC

multi

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AFSSO USAFE
AFSSO PACAF

OPCEN
CNO

YWQLAZC/AFSSO SAC
YWQLAZC/AFSSO ACIC
YWQLAZC/AFSSO FTD
ZEM
T O P S E C R E T

25X1

25X1

25X1

25X1

25X1

SSOS PASS TO APPROPRIATE TCOS. ~~SECTION ONE OF~~

TWO. CITE NPIC 3085.

SUBJECT: CAMERA INFORMATION FOR MISSION 1011-1.

A. THIS PHOTOGRAPHY INVOLVES THE USE OF EIGHT CAMERAS: TWO MAIN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA, AND AN INDEX CAMERA.

B. OPERATIONAL FOCAL LENGTHS (MM)

HORIZON

	MAIN	PORT	STARBOARD	STELLAR	INDEX
FWD UNIT	609.625	55.14	54.65	(PART 1) 83.9216	38.1594
AFT UNIT	609.549	55.07	55.60		

C. LENS DISTORTION (PIN CUSHION) MM

(1) MAIN LENS	3	2	1	0	359	358	357
FWD UNIT	.004	.000	.000	.000	.000	.003	.007
AFT UNIT	.003	.000	.000	.000	.002	.004	.005

(2) HORIZON CAMERAS (MM) FWD

25X1

TOP SECRET

-2-

1

	PORT	STARBOARD	PORT	STARBOARD
(RADIAL) 10 DEGREES	.001	.000	.006	.003
20 DEGREES	.005	.001	.007	.004
(TANGENTIAL) MAX VECTOR	.007	.005	.002	.005

D. DEPRESSION ANGLES OF HORIZON CAMERAS RELATIVE TO NOMINAL MAIN CAMERA

	PORT	STARBOARD
FWD	14 DEGREES 58 MIN.	15 DEGREES 18 MIN.
AFT	14 DEGREES 19 MIN.	14 DEGREES 55 MIN.

E. CAMERA FILTER AND EXPOSURE DATA

	MAIN	HORIZON	STELLAR INDEX	
FILTER	WRATTEN 21	WRATTEN 25	NONE	WRATTEN 21
APERTURE	F 3.5	STARBOARD F 8.0	F 1.8	F 4.5
		PORT F 6.8		
SLIT WIDTH/EXPOSURE	0.175 INCH	1/100 SEC.	2.0 SEC	1/500 SEC
FILM	4404	4404	4401	4404

F. RESOLUTION CAPABILITIES

(1) (L/MM AVG)	MAIN	PORT HORIZON	STARBOARD HORIZON
FWD	187	97	92
AFT	178	86	92

(2) INDEX (L/MM AWAR)	PART 1	75	PART 2	73

G. TIMING MARKS

FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

H. CALIBRATED ANGLES OF CAMERAS

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(1) CALIBRATED CONVERGENT ANGLE OF MAIN CAMERAS 29 DEGREES
56.793 MIN

(2) CALIBRATED ANGLE BETWEEN STELLAR AND INDEX CAMERAS
(PART 1) 89 DEGREES 52.5 MIN.

I. IMAGE MOTION COMPENSATION DATA

A. CYCLE RATE (CPS) AND GROUND ANGULAR VELOCITY (GAV
IN RAD/SEC)

REF. LEVEL	AMPL. LEVEL
NO. CPS GAV. NO. CPS GAV.	
7 0.3249 .0294 4 0.1286 .0016	

B. PASSES: REF. 7, AMPL. 4 : 1D1 THRU 16D1
REF. 6, AMPL. 4 : 19D1 THRU 57D2 (SEE PARA L)

J. PROGRAM TIME DATA

PASS	CAMERA ON TIME				PROGRAM ON TIME		PROGRAM
	(ZEBRA TIME)				UP RAMP	DURATION	
	DAY	HR	MIN	SEC	SEC	SEC	
1D1	05	23	19	02	1325	32	
5D1	06	05	24	00	1441	176	
6D1	06	06	47	04	930	81	
6D2	06	06	52	49	1274	145	
6D3	06	06	56	20	1486	83	
6D4	06	06	59	34	1679	142	
7D1	06	08	23	52	1293	84	
7D2	06	08	26	08	1429	144	
9AE	06	11	04	48	59	47	

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9D1	06	11	25	58	1328	205
14D1	06	19	07	26	1805	67
16D1	06	22	05	30	1602	37
19D1	07	02	25	25	868	66
19D2	07	02	29	52	1135	182
19D3	07	02	33	33	1356	70
20D1	07	04	02	46	1264	209
21D1	07	05	33	33	1270	194
21D2	07	05	41	06	1723	144
22D1	07	06	59	47	1000	77
22D2	07	07	04	50	1303	163
22D3	07	07	09	39	1592	187
24D1	07	10	03	20	1114	170
24D2	07	10	08	13	1407	100
25D1	07	11	37	33	1325	280
30D1	07	19	15	59	1629	60
30D2	07	19	17	37	1727	60
32D1	07	22	17	41	1647	38
36D1	08	04	14	52	1311	306
37D1	08	05	41	34	1072	68
37D2	08	05	43	19	1177	113
37D3	08	05	47	25	1423	70
37D4	08	05	49	56	1574	143
37D5	08	05	54	53	1871	70
38D1	08	07	17	04	1360	70

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38D2	08	07	18	56	1472	66
38D3	08	07	19	26	SEE PARA L	
					1539	45
38D4	08	07	20	48	1584	103
38D5	08	07	22	32	SEE PARA L	
					1688	102
38D6	08	07	24	15	1791	45
39D1	08	08	44	53	1192	89
39D2	08	08	47	25	1344	140
39D3	08	08	50	20	1520	65
39D4	08	08	52	02	1622	80
40D1	08	10	17	44	1323	359
41D1	08	11	50	35	1452	131
47D1	08	20	58	39	1691	114
52D1	09	04	26	26	1359	372
53D1	09	06	01	43	1635	395
54D1	09	07	30	12	1505	385
55D1	09	08	58	35	1365	389
56D1	09	10	28	46	1387	179
57D1	09	12	01	33	1515	131
57D2	09	12	15	54	SEE PARA L	
					2376	98

NOTE: DATA IS THE SAME FOR BOTH THE MASTER (FWD) AND SLAVE (AFT)
UNITS EXCEPT WHERE NOTED.

K. TIME CORRELATION (MILLISECONDS)

PASS SYSTEM TIME CLOCK TIME DIFFERENCE

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9	39916.195	397100.629	
16	79696.309	436880.744	PLUS .001
25	40651.921	484236.357	PLUS .001
31	74888.407	518472.845	PLUS .002
32	80332.711	523917.150	PLUS .001
40	35741.650	028855.179	PLUS .001
47	75681.316	068794.847	PLUS .002
56	36619.949	116133.480	.000
63	76218.228	155731.760	PLUS .001

L. REMARKS

1. BOTH CAMERAS CYCLED SLOW ON PASSES 1D1 THRU 16D1.
THE SETTING OF R6A4 IS AN ATTEMPT TO BOOST CYCLE
RATES TO APPROXIMATE R7A4.
2. PASSES 38D3, 38D5 AND 57D2 ARE MONO OPERATIONS
WITH THE AFT UNIT ONLY.

GP-1.

T O P S E C R E T

-END OF MESSAGE-

(ALSO PASSED ☐)

25X1